

ABSTRACT

A spit-frame, heavy truck, suspension system for trucks that haul trailers made of three moveably interlocked rigid frames referred to as the front frame, rear frame, and interconnecting frame. The front frame supports the cab, engine, and transmission. The rear primary frame supports the drive axle and fifth wheel. The rear end of the interconnecting frame is pivotally mounted to the rear frame whereby the rear frame may rotate about a transverse axis. The front end of the interconnecting frame is mounted to the front frame in a manner that permits the interconnecting frame to rotate and pivot along its longitudinal axis relative to the front frame. Hydraulic cylinders are used to dampen vibrations and oscillations within this spit-frame structure. An alternative embodiment allows the front frame to connect directly to the rear frame.